

## **Ibstock Environmental Report 2000**

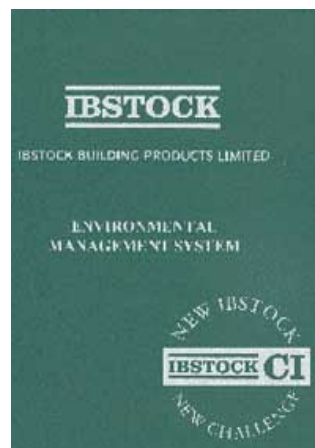
Produced in accordance with the BiE 10 parameters of environmental engagement - a model for environmental reporting along Government guidelines for FTSE 350 businesses and is strongly supported by Michael Meacher.



Ibstock Brick and the Environment is the new environmental publication available from Ibstock offices, alternatively it can be downloaded from the company internet web site at [www.ibstock.co.uk](http://www.ibstock.co.uk).

### ***Environmental Management Systems***

- A total of 5 sites have been assessed and awarded certification to ISO 14001 by BSI during 2000. A further 7 sites are working towards assessment during 2001, these sites include at least 2 from the South East of Britain where environmental concerns are possibly at the highest nation-wide.



- Issue 3 of the Ibstock Group Manual has been issued to every manufacturing site, this Manual has been assessed and approved by BSI as complying with the requirements of ISO 14001. This manual is supplemented with site-specific environmental procedures tailored to each location.

### ***Board Member with responsibility***

The Technical Director has executive responsibility for environmental matters. During 2000 he had the chair of the Company Environmental Targets and Objectives Working Group (ETOWG). At the end of 2000 the group had completed the tasks for which it had been formed and it was formally dissolved. A new group will now be formed, with the Technical Director in the chair, to take environmental continuous improvement (including environmental targets) forward within the Company.

### ***Corporate Environmental Policy***

- This has been issued within Issue 3 of the Istock Group Manual.
- The policy is freely available for downloading on Company Internet site. [www.Istock.co.uk]  
*Choose Company menu from the home page, then environmental issues.*
- It is also contained within the Environment Report, which is available by contacting Istock and it is also available as a download on the Company Internet site.

Our Environmental Policy is replicated below.

*Istock Brick Ltd is a UK based manufacturer of clay bricks and associated walling components for supply to the construction market. The principle focus for the business is in housing and commercial buildings together with the industrial and architectural sectors.*

*In the conduct of its operations Istock Brick Ltd is committed to continuous improvement in environmental performance. It will seek to prevent pollution of the environment by the adoption of processes, practices, materials and control mechanisms which maximise the efficient use of resources. It will seek to reduce emissions to the lowest level consistent with the Industry best practice.*

*Istock Brick Ltd will:*

*As a minimum comply with the requirements of all relevant legislation.*

*Regularly review and, where necessary, update its management policies and activities in the light of new information concerning the impact of its business on the environment, employees or neighbours.*

*Manage efficiently the consumption of energy and materials and the generation of waste in all its operations.*

*Keep the local public informed of any major new projects which we intend undertaking.*

*Provide relevant training for employees to assist them in better understanding how they and our company can achieve the goal of improving our environmental performance.*

### ***Corporate Environmental Objectives***

- Energy consumption targets are set to achieve ca 10% saving (throughout Istock overall as a Company) on specific energy consumption per fired tonne by 2010. This objective is consistent with a sector-negotiated agreement under the Climate Change Levy (CCL) with the DETR.
- Several sites have now completed work on process optimisation to achieve a Fluoride emission in the kiln exhaust gases not exceeding 10mg per cubic metre at the normalised conditions. These sites include Leicester (both factories on site), Pinhoe, Aldridge and Ashdown. Work continues at Stourbridge with this sustainable technology.

- Research and development continued during 2000 at a selected Ibstock site into energy efficient technology reducing kiln firing times and emissions. Experience with different materials and firing schedules has been gained during this time, some of this experience will be used for future plant modernisation.
- All sites have begun a process of mapping site drains, both surface water and foul drains. Those sites submitting for ISO 14001 are required to adopt a colour coded identification system for drains.  
As a result of work in this area, some sites are exploring the possibility of using recovered rainwater to replace mains water used in the process. Our Leicester factory uses no mains water whatsoever for the process.
- All bulk liquid storage tanks at all sites are now protected by a combination of retaining bunds, diversion of site drains and the use of surface contours (combined with monitoring) to ensure as far as possible that liquid pollution cannot leave site.
- Awareness of environmental issues by office personnel has been identified as a key area for development. A training package has been designed to cater for such circumstances and this is to be combined with Health and Safety issues for office personnel undertaking training in 2001.
- A preliminary investigation has shown that the majority of customers would prefer more packaging materials with the product such that storage outside in all site conditions could be for longer periods. This is obviously in conflict with current efforts to reduce the amount of packaging materials. The recovery of the materials directly from sites is unlikely to yield the quality of packaging required for recycling back into the packaging chain. Work continues in this area. Ibstock will not knowingly purchase timber (for use in packaging) unless it is from sustainable forests under the Forest Stewardship Council (FSC) or equivalent schemes. Recycling of paper and plastic at administration sites was initiated in 2000, the success of the schemes is dependent on the locality of recycling facilities. Until the economics of recycling changes dramatically such systems will not be universally successful.

### ***Environmental Targets***

The Environmental Targets and Objectives Working Group met twice in 2000 to monitor progress with Company environmental objectives and individual site targets. It has been recognised that not all procedures can be introduced at all 25 Ibstock sites with equal speed and effectiveness using the available resources. Particular issues have been identified for priority treatment, sites wishing to submit for ISO 14001 are required to adopt all procedures and operate them effectively for a period of time prior to assessment.

Considerable work has been undertaken to reduce and control Fluoride emissions from kilns at factories where flue gas scrubbing has been installed and/or commissioned during 2000 (in alphabetical order) Birtley; Cattybrook; Chesterton; Dorket Head; Nostell; Parkhouse; Ravenhead; Roughdales; South Holmwood; Tannochside and Throckley.

All sites now have comprehensive spill kits available to contain (and deal with) minor liquid spillages. Training in the proper use of such kits had been conducted at all sites with some site personnel, engineering staff in particular have been trained. However, all sites submitting for ISO 14001 are required to have comprehensive training in the use of kits with adequate arrangements to deal with shift changes, holidays and sickness.

Environmental training of the entire workforce has been completed at all sites assessed for ISO 14001 during 2000. In addition some 50% of the whole company workforce has now received environmental awareness training. All production managers received awareness training in 1999. It is planned to review awareness training for the workforce at ISO 14001 sites at the end of 2001.

Office personnel are to receive their own awareness training in 2001 (see above).

Environmental targets will in future include emissions to all media. In order to set Key Performance Indicators (KPIs) which are meaningful, figures have to be gathered and baseline data established. This process has started and some data is given below.

The control of emissions of greenhouse gases constitutes an important part of the sustainability agenda for all industrial processes. Importantly, reductions in the emission of Carbon Dioxide is now to be encouraged by the Climate Change Levy (to be introduced in April 2001). The Levy is applied to obligated fuels (gas, LPG, electricity and some solid fuels) used "for heating purposes" in the process, and calculated on the basis of SEC per fired tonne of product.

Emissions to environmental media have been estimated wherever possible and are represented below. Figures are cumulative for all clay brick factories. The intermittent nature of the volume and concentration of very low levels of suspended solids in water at consented discharge points to controlled waters makes assessment of quantities very difficult, these figures are not available at the time of publication. Discharges to sewer are similarly not included at this point in time, however, no "Red List" substances are discharged at any Ibstock clay brick site:

***Average Specific Energy Consumption (SEC) as defined by Climate Change Levy criteria:***

788.4 kWh (kilowatt hrs) of metered solid, liquid and gaseous applied fuels, together with electrical energy, per net saleable tonne of fired output.

***Emissions to air*** (main sources kiln exhausts, does not include emissions due to transportation)  
[all figures are cumulative for all 24 clay brick manufacturing sites]

Fluorides (expressed as Hydrogen Fluoride)	207 tonnes/annum
Oxides of Sulphur (expressed as SO <sub>2</sub> )	990 tonnes/annum
Oxides of Nitrogen (expressed as NO)	251 tonnes/annum
Chlorides (expressed as Hydrogen Chloride)	90 tonnes/annum
Carbon Dioxide CO <sub>2</sub>	313,000 tonnes/annum
Particulate matter	26 tonnes/annum

***Disposals to landfill*** (estimated figures)

Inert	12,000 tonnes/annum
Non-hazardous	5,000 tonnes/annum
Hazardous	25 tonnes/annum

***Recycled materials*** (estimated figures)

Metals (in addition to VALPAK obligation quantity)	625 tonnes/annum
Oils (various)	5600 litres/annum

It is hoped to include more details in the next report which for various reasons cannot be easily quantified at this point in time eg wooden pallets, aerosol cans etc.

### ***Internal Environmental Audit***

An internal Environmental Audit has been conducted at every manufacturing Ibstock site. 9 of these were risk assessment audits conducted with external consultants.

The audit results are divided into 4 key areas:

Environmental Management System (includes controls, awareness and training)

Emissions & Discharges (into all three environmental media air, water, land)

Waste Management (includes housekeeping, waste minimisation and recycling)

Storage (bulk and small quantities).

Scoring of each of the 4 key areas was from 1-5.

1 represents a totally unacceptable performance which requires immediate priority attention.

3 represents an acceptable level of performance (scores less than 3 are unacceptable).

5 represents a new standard of industry best practice.

Audit results were also compared to 1999 to assess the degree of progress over a 12 month period.

No sites recorded an overall score (over the 4 key areas) of less than 11 in 2000 this score is considered to be unacceptable regardless of individual key area scores. In 1999 a total of 4 sites recorded scores of 11 or below, the improvement in performance is indicative of the commitment to environmental development within Ibstock.

15 of the 26 sites included in the 2000 audit programme recorded an improvement over 1999 performance.

### ***Environment focused supplier scheme***

Major suppliers have again been approached in 2000 on the basis of the value of the supplied materials or services rather than quantity supplied. We have retained Environmental Policies or "Environmental Statements". We have yet to receive environmental performance indicators (KPIs) which they themselves would use to monitor the progress of their business with regard to the environment from any supplier - a disappointing result.

### ***Employee Environment Programme***

- Environmental awareness training is now included as a part of the induction training for new employees at the majority of sites. All contractors appointed to carry out work on sites are required to sign and return confirmation of the Company Contractors Rules.
- A package for office personnel is being developed "in house" and will be given to all office staff in 2001.
- Articles have been published during 2000 in Ibstock internal publications, including:
  - CI Update - a copy of this is sent to each employee's home address.
  - Team Talk - a newsletter for sales staff. Each member of sales receives their own copy.
  - An article was published externally in "Clay Technology" - the magazine of the Institute of Clay Technology which is the relevant professional institute for industry managers.

### ***Environmental Stewardship***

- Ibstock together with Cory Environmental have founded the Ibstock Cory Environmental Trust (ICET) to use funds available via ENTRUST Landfill Tax rebates for qualifying community projects. A committee containing a representative from Ibstock is used to "vet" the applications for funding. It is anticipated that up to £600,000 is potentially available for community projects during 2001.
- Ibstock have an active policy of community liaison and during 2000 many contacts with local schools and colleges were made, at least one of these involved pupils making bricks as a part of a flood defence scheme for their area.
- During 2000 approximately 1000 trees and 2300 hedging shrubs were planted as a part of restoration programmes. 1.4 hectares of land were also restored.
- During 2000 there have been 3 public consultations in support of Planning Applications for the development of sites at Maltby, Bishopbriggs and Armadale.

There is an on-going display of computer simulated working of a clay quarry at Knight and Sons Solicitors, Newcastle under Lyme in support of company initiatives on the requirement for Fireclays and the company perspective on the need for landbanks for extraction of clays. Included in the display is a reasoned argument for the exclusion of brick clays from the proposed Minerals Tax for the extractive industries.

### ***Stakeholder Communication***

- Ibstock has actively participated with Trade Associations to offer comment in the consultation of many papers issued by the Department of Environment, Transport and the Regions. The most prominent of these in 2000 involved detailed discussions in respect of the Climate Change Levy (CCL) which is to be introduced in the 2001-2002 Tax year.
- Ibstock Brick Ltd Leicester site has been asked to assist the DETR with a Pollution Prevention and Control Act (PPC) draft A2 application. This is one of only 6 such draft application processes in Britain at this time and is to represent the entire Ceramic industry falling within the PPC regulations.
- The Internet site is subject to constant update and is the source most initial contacts for information are directed to by Ibstock personnel.
- Neighbourhood liaison is continuing at Himley, Lodge Lane (for Redhurst Quarry), Ravenhead and Cattybrook.

The logo for Ibstock Brick features the word "IBSTOCK" in a bold, blue, sans-serif font, positioned above the word "BRICK" in the same style. The text is flanked by two horizontal blue bars, one above "IBSTOCK" and one below "BRICK".

**IBSTOCK**  
**B R I C K**